

**REMARKS**

In the February 27, 2004 Office Action, the Examiner noted that claims 1-15 were pending in the application; rejected claims 1-4 and 11-14 under 35 U.S.C. §102(e); and rejected claims 5-10 and 15 under 35 U.S.C. § 103(a). In rejecting the claims, U.S. Patents 6,182,109 to Sharma et al. and 6,388,446 to Torii (References C and D, respectively). Claims 2, 7 and 12 have been cancelled and thus, claims 1, 3-6, 8-11 and 13-15 remain in the case. The Examiner's rejections are traversed below.

In item 2 on pages 2-6 of the Office Action, claims 1-4 and 11-14 were rejected under 35 U.S.C. §102(e) as unpatentable over Sharma et al. Independent claim 1 has been amended to include limitations similar to those originally recited in claim 2 which has been cancelled. Specifically, claim 1 now recites "comparing the number of the standby threads with a necessary number at a predetermined time interval" (claim 1, lines 5-6) and "terminating an amount of the standby threads exceeding the necessary number when the number of the standby threads is greater than the necessary number" (claim 1, last 2 lines). Independent claims 6 and 11 have been amended to recite similar limitations.

As a non-limiting example, the number of standby threads can be compared to the necessary number at points in time. When the number of standby threads exceeds the necessary number, the amount of standby threads exceeding the necessary number are terminated. Thus, the present invention provides the benefits that unnecessary threads do not take up system resources and system performance may be improved.

In contrast, Sharma et al. only discusses reducing a number of unused threads. In Sharma et al., if the amount of unused threads is greater than a minimum number of threads and a number of reserved threads is less than the minimum number of threads, then the number of threads in a pool is reduced by one. However, Sharma et al. do not discuss or suggest comparing the number of standby threads with a necessary number at a time interval, and does not discuss or suggest terminating an amount of the standby threads exceeding the necessary number, as recited in the pending independent claims. Accordingly, it is respectfully submitted independent claims 1 and 11 and each of the claims dependent therefrom patentably distinguish over Sharma et al.

Claims 5 and 15 were rejected under 35 U.S.C. §103(a) as unpatentable over Sharma et al. Claims 5 and 15 depend on independent claims 1 and 11, respectively, which, as discussed above, patentably distinguish over Sharma et al. Accordingly, it is respectfully submitted that claims 5 and 15 also patentably distinguish over Sharma et al.

Claims 6-10 were rejected under 35 U.S.C. §103(a) as unpatentable over Sharma et al. and U.S. Patent No. 6,389,446 to Torii. Claim 6 has been amended to recite limitations similar to those discussed above with respect to claim 1 and therefore patentably distinguishes over Sharma et al. taken alone for the reasons discussed above with respect to claim 1. Further, Torii describes a multi-processor system including a plurality of thread processors, but does not teach or suggest a comparison circuit and a termination circuit, as recited in independent claim 6. Further, it is respectfully submitted that Torii also does not teach or suggest the features as discussed above. Accordingly, it is respectfully submitted that independent claim 6 and claims 7-10 depending therefrom, patentably distinguish over Sharma et al. in view of Torii.

For the reasons set forth above, it is submitted that the cited prior art references, taken individually or in combination, do not teach or suggest the features of the present claimed invention. Thus, it is submitted that claims 1, 3-6, 8-11 and 13-15 are in a condition suitable for allowance. Reconsideration of the claims and an early Notice of Allowance are earnestly solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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**CERTIFICATE UNDER 37 CFR 1.8(a)**  
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on 6/28/2004  
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